

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application. Please cancel claims 1, 3, and 9 without prejudice or disclaimer.

Listing of Claims:

1. (Canceled)
2. (Currently amended) The copolymer according to ~~claim 1~~claim 38, the component a) comprising tert-butyl acrylate.
- 3-4. (Canceled)
5. (Currently amended) The copolymer according to ~~claim 1~~claim 38, wherein component c1) is selected from the group consisting of α,β -ethylenically unsaturated mono- and dicarboxylic acids, sulfonic acids, phosphonic acids and mixtures thereof.
6. (Currently amended) The copolymer according to ~~claim 1~~claim 38, wherein component c1) is selected from the group consisting of acrylic acid, methacrylic acid, itaconic acid and mixtures thereof.
7. (Currently amended) The copolymer according to ~~claim 1~~claim 38, wherein component c2) is selected from the group consisting of esters of α,β -ethylenically unsaturated mono- and dicarboxylic acids with amino alcohols which may be mono- ~~and~~or dialkylated at the amine nitrogen, amides of α,β -ethylenically unsaturated mono- and dicarboxylic acids with diamines which have at least one primary and secondary amino group, N,N-diallylamine, N,N-diallyl-N-alkylamines and the derivatives thereof, vinyl- and allyl-substituted nitrogen heterocycles, vinyl- and allyl-substituted heteroaromatic compounds and mixtures thereof.
8. (Currently amended) The copolymer according to ~~claim 1~~claim 38, wherein component

c2) is selected from the group consisting of N-vinylimidazole, N-(tert-butylamino)ethyl (meth)acrylate, N,N-dimethylaminoethyl (meth)acrylate, N-[3-(dimethylamino)propyl]-(meth)acrylamide and mixtures thereof.

9. (Canceled)

10. (Currently amended) The copolymer according to ~~claim 4~~claim 39, further comprising incorporating in the form of polymerized units, at least one additional monomer e) which is selected from esters, differing from component a), of α,β -ethylenically unsaturated mono- and dicarboxylic acids with C₁-C₃₀-alkanols and C₁-C₃₀-alkanediols, amides of α,β -ethylenically unsaturated mono- and dicarboxylic acids with C₂-C₃₀-amino alcohols which have a primary or secondary amino group, N-vinylamides of saturated monocarboxylic acids, primary amides of α,β -ethylenically unsaturated monocarboxylic acids and the N-alkyl and N,N-dialkyl derivatives thereof, esters of vinyl alcohol and allyl alcohol with C₁-C₃₀-monocarboxylic acids, vinyl ethers, vinyl aromatics, vinyl halides, vinylidene halides, C₁-C₈-monoolefins, nonaromatic hydrocarbons having at least two conjugated double bonds and mixtures thereof.

11. (Previously Presented) The copolymer according to claim 10, wherein component e) is selected from the group consisting of C₁-C₃-alkyl methacrylates, hydroxy-C₁-C₃-alkyl methacrylates and mixtures thereof.

12. (Previously Presented) The copolymer according to claim 11, wherein component e) comprises or consists of ethyl methacrylate.

13. (Currently amended) The copolymer according to ~~claim 4~~claim 10, comprising:

- from 20 to 90, ~~particularly preferably from 25 to 85~~, % by weight of at least one compound a),
- from 5 to 40, ~~particularly preferably from 10 to 35, in particular from 13 to 30~~, % by weight of acrylic acid and/or methacrylic acid b),
- from 0.5 to 25, ~~particularly preferably from 1 to 20, in particular from 2 to 16~~, %

by weight of a monomer composition c),

- from 0 to 85, particularly preferably from 1 to 60, in particular from 5 to 50, % by weight of at least one compound d),
- from 0 to 25, particularly preferably from 0.1 to 20, in particular from 1 to 15, % by weight of at least one compound e),
- from 0 to 5, particularly preferably from 0.01 to 3, in particular from 0.1 to 2, % by weight of at least one crosslinking agent f),

incorporated in the form of polymerized units.

14. (Currently amended) The copolymer according to ~~claim 4~~claim 39, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid and/or methacrylic ~~acid~~acid, and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole.

15. (Currently amended) The copolymer according to ~~claim 4~~claim 39, which consists of repeating units of

- tert-butyl acrylate,
- tert-butyl methacrylate,
- acrylic acid and/or methacrylic ~~acid~~acid, and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole.

16. (Currently amended) ~~The copolymer according to claim 4 An ampholytic copolymer comprising a molar excess of anionogenic and/or anionic groups and being obtained by free radical polymerization~~, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid ~~and/or~~and methacrylic acid,
- N-(tert-butyl)acrylamide ~~and~~and,

- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole,
the molar ratio of N-(tert-butyl)acrylamide to N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole being about 1 : 1.

17. (Currently amended) The copolymer according to claim 4 An ampholytic copolymer comprising a molar excess of anionogenic and/or anionic groups and being obtained by free radical polymerization, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid and/or methacrylic acid,
- vinylpyrrolidone and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole,
the molar ratio of vinylpyrrolidone to N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole being about 1 : 1.

18. (Currently amended) The copolymer according to claim 4 An ampholytic copolymer comprising a molar excess of anionogenic and/or anionic groups and being obtained by free radical polymerization,, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid and/or methacrylic acid,
- N-(tert-butyl)acrylamide,
- vinylpyrrolidone and
- N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole,
the molar ratio of vinylpyrrolidone to N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]-methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole being about 1 : 1.

19. (Currently amended) The copolymer according to ~~claim 4~~claim 38, which comprises, incorporated in the form of polymerized units,

- a) tert-butyl acrylate,
- b) acrylic acid ~~and/or~~and methacrylic acid,
- c) N-(tert-butyl)aminoethyl acrylate or N-(tert-butyl)aminoethyl (meth)acrylate or N-[3-(dimethylamino)propyl]methacrylamide or N,N-dimethylaminoethyl methacrylate or N-vinylimidazole,
- d) optionally, vinylpyrrolidone and
- e) at least one compound which is selected from C₁-C₃-alkyl methacrylates, hydroxy-C₁-C₃-alkyl methacrylates and mixtures thereof,

with the proviso that the proportion by weight of component a) is equal to or greater than the proportion by weight of component e).

20. (Currently amended) The copolymer according to ~~claim 4~~claim 38, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid ~~and/or~~and methacrylic acid,
- N-(tert-butyl)aminoethyl (meth)acrylate or N-vinylimidazole and
- ethyl methacrylate,

with the proviso that the proportion by weight of tert-butyl acrylate is equal to or greater than the proportion by weight of ethyl methacrylate.

21. (Currently amended) The copolymer according to ~~claim 4~~claim 38, which consists of repeating units of

- tert-butyl acrylate,
- acrylic acid ~~and/or~~and methacrylic acid,
- N-vinylpyrrolidone,
- N-(tert-butyl)aminoethyl (meth)acrylate or N-vinylimidazole and
- ethyl methacrylate,

with the proviso that the proportion by weight of tert-butyl acrylate is equal to or greater than the proportion by weight of ethyl methacrylate.

22. (Currently Amended) The copolymer according to ~~claim 1~~claim 38, which comprises, based in each case on the total weight of the monomers used for the polymerization,

- from 20 to 80% by weight, ~~preferably from 25 to 75% by weight~~, of tert-butyl acrylate and ethyl methacrylate, with the proviso that the proportion by weight of tert-butyl acrylate is equal to or greater than the proportion by weight of ethyl methacrylate,
- from 5 to 30% by weight, ~~preferably from 10 to 25% by weight~~, of acrylic acid and/or methacrylic acid,
- from 1 to 20% by weight, ~~preferably from 3 to 15% by weight~~, of a monomer composition comprising methacrylic acid and N-vinylimidazole or methacrylic acid and N-(tert-butyl)aminoethyl (meth)acrylate and
- from 0 to 35% by weight of vinylpyrrolidone,
incorporated in the form of polymerized units.

23. (Currently amended) A polyelectrolyte complex comprising at least one amphotolytic copolymer, as defined in ~~claim 1~~claim 38, and at least one polyelectrolyte PE) differing therefrom.

24. (Currently amended) A cosmetic or pharmaceutical composition comprising

- A) at least one amphotolytic copolymer, as defined in ~~claim 1~~claim 38, or a polyelectrolyte complex, comprising at least one amphotolytic copolymer as defined in ~~claim 1~~claim 38 and at least one polyelectrolyte PE) differing therefrom, and
- B) at least one cosmetically or pharmaceutically acceptable carrier.

25. (Currently amended) The composition according to claim 24, wherein component B) is selected from the group consisting of

- i) water,
- ii) water-miscible organic solvents, ~~preferably C₂-C₄-alkanols, in particular ethanol~~,

- iii) oils, fats, waxes,
- iv) esters of C₆-C₃₀-monocarboxylic acids with monohydric, dihydric or trihydric alcohols, which esters differ from iii),
- v) saturated acyclic and cyclic hydrocarbons,
- vi) fatty acids,
- vii) fatty alcohols,
- viii) propellants

and mixtures thereof.

26. (Previously Presented) The composition according to claim 24, comprising at least one additive which differs from the components A) and B) and is selected from the group consisting of cosmetically active substances, emulsifiers, surfactants, preservatives, perfume oils, thickeners, hair polymers, hair and skin conditioners, graft polymers, water-soluble or dispersible silicone-containing polymers, light stabilizers, bleaches, gel formers, care compositions, colorants, tinting compositions, tanning compositions, dyes, pigments, consistency agents, moisturizers, refatting agents, collagen, protein hydrolysis products, lipids, antioxidants, antifoams, antistatic agents, emollients and plasticizers.

27. (Previously Presented) The composition according to claim 24 in the form of a gel, of a foam, of a spray or of a mousse, ointment, cream, emulsion, suspension, lotion, milk or paste.

28. (Previously Presented) The cosmetic or pharmaceutical composition according to claim 24, wherein the composition is a skin cleansing composition, a composition for the care and for the protection of the skin, a nail care composition, a formulation for decorative cosmetics or a hair treatment composition.

29. (Previously Presented) The cosmetic or pharmaceutical composition according to claim 24, wherein the composition is a hair setting composition and/or a hair conditioner.

30. (Previously Presented) The composition according to claim 29, wherein the composition

is in the form of a hair gel, shampoo, foam setting composition, hair lotion, hairspray or hair foam.

31. (Canceled)

32. (Previously Presented) A coating material for a solid dosage form comprising the cosmetic or pharmaceutical composition according to claim 24.

33. (Currently amended) A rheological modifier comprising the amphotolytic copolymer as claimed in ~~claim 1~~claim 38.

34. (Currently amended) An adhesive comprising the amphotolytic copolymer as claimed in ~~claim 1~~claim 38.

35. (Currently amended) A coating comprising the amphotolytic copolymer as claimed in ~~claim 1~~claim 38.

36. (Currently amended) An article coated with the amphotolytic copolymer as claimed in ~~claim 1~~claim 38.

37. (Previously Presented) The coated article as claimed in claim 36, wherein the article is textile, paper, print or leather.

38. (New) An amphotolytic copolymer comprising a molar excess of anionogenic and/or anionic groups, obtained by free radical polymerization of

- a) at least one branched C₃-C₅-alkyl acrylate,
- b) acrylic acid and methacrylic acid, with the proviso that the proportion by weight of acrylic acid is equal to or greater than the proportion by weight of methacrylic acid, and
- c) a monomer composition comprising

c1) at least one compound having an α,β -ethylenically unsaturated double bond capable of free radical polymerization and at least one anionogenic and/or anionic group per molecule and

c2) at least one compound having an α,β -ethylenically unsaturated double bond capable of free radical polymerization and at least one cationogenic and/or cationic group per molecule,

the molar ratio of anionogenic and anionic groups of component c1) to cationogenic and cationic groups of component c2) being about 1 : 1.

39. (New) An amphotolytic copolymer comprising a molar excess of anionogenic and/or anionic groups, obtained by free radical polymerization of

- a) at least one branched C₃-C₅-alkyl acrylate,
- b) acrylic acid and/or methacrylic acid,
- c) a monomer composition comprising
 - c1) at least one compound having an α,β -ethylenically unsaturated double bond capable of free radical polymerization and at least one anionogenic and/or anionic group per molecule,
 - c2) at least one compound having an α,β -ethylenically unsaturated double bond capable of free radical polymerization and at least one cationogenic and/or cationic group per molecule, and
 - d) at least one N-vinylactam incorporated in the form of polymerized units

the molar ratio of anionogenic and anionic groups of component c1) to cationogenic and cationic groups of component c2) being about 1 : 1.

40. (New) The copolymer according to claim 39, the component a) comprising tert-butyl acrylate.

41. (New) The copolymer according to claim 39, wherein component c1) is selected from the group consisting of α,β -ethylenically unsaturated mono- and dicarboxylic acids, sulfonic acids, phosphonic acids and mixtures thereof.

42. (New) The copolymer according to claim 39, wherein component c1) is selected from the group consisting of acrylic acid, methacrylic acid, itaconic acid and mixtures thereof.
43. (New) The copolymer according to claim 39, wherein component c2) is selected from the group consisting of esters of α,β -ethylenically unsaturated mono- and dicarboxylic acids with amino alcohols which may be mono- or dialkylated at the amine nitrogen, amides of α,β -ethylenically unsaturated mono- and dicarboxylic acids with diamines which have at least one primary and secondary amino group, N,N-diallylamine, N,N-diallyl-N-alkylamines and the derivatives thereof, vinyl- and allyl-substituted nitrogen heterocycles, vinyl- and allyl-substituted heteroaromatic compounds and mixtures thereof.
44. (New) The copolymer according to claim 38, wherein component c2) is selected from the group consisting of N-vinylimidazole, N-(tert-butylamino)ethyl (meth)acrylate, N,N-dimethylaminoethyl (meth)acrylate, N-[3-(dimethylamino)propyl](meth)acrylamide and mixtures thereof.
45. (New) A polyelectrolyte complex comprising at least one amphotropic copolymer, as defined in claim 39, and at least one polyelectrolyte PE) differing therefrom.
46. (New) A cosmetic or pharmaceutical composition comprising
 - A) at least one amphotropic copolymer, as defined in claim 39, or a polyelectrolyte complex, comprising at least one amphotropic copolymer as defined in claim 39 and at least one polyelectrolyte PE) differing therefrom, and
 - B) at least one cosmetically or pharmaceutically acceptable carrier.
47. (New) The composition according to claim 46, wherein component B) is selected from the group consisting of
 - i) water,

- ii) water-miscible organic solvents,
- iii) oils, fats, waxes,
- iv) esters of C₆-C₃₀-monocarboxylic acids with monohydric, dihydric or trihydric alcohols, which esters differ from iii),
- v) saturated acyclic and cyclic hydrocarbons,
- vi) fatty acids,
- vii) fatty alcohols,
- viii) propellants,

and mixtures thereof.

48. (New) The composition according to claim 46, comprising at least one additive which differs from the components A) and B) and is selected from the group consisting of cosmetically active substances, emulsifiers, surfactants, preservatives, perfume oils, thickeners, hair polymers, hair and skin conditioners, graft polymers, water-soluble or dispersible silicone-containing polymers, light stabilizers, bleaches, gel formers, care compositions, colorants, tinting compositions, tanning compositions, dyes, pigments, consistency agents, moisturizers, refatting agents, collagen, protein hydrolysis products, lipids, antioxidants, antifoams, antistatic agents, emollients and plasticizers.

49. (New) The composition according to claim 46 in the form of a gel, of a foam, of a spray or of a mousse, ointment, cream, emulsion, suspension, lotion, milk or paste.

50. (New) The cosmetic or pharmaceutical composition according to claim 24, wherein the composition is a skin cleansing composition, a composition for the care and for the protection of the skin, a nail care composition, a formulation for decorative cosmetics or a hair treatment composition.

51. (New) The cosmetic or pharmaceutical composition according to claim 46, wherein the composition is a hair setting composition and/or a hair conditioner.

52. (New) The composition according to claim 51, wherein the composition is in the form of a hair gel, shampoo, foam setting composition, hair lotion, hairspray or hair foam.

53. (New) A coating material for a solid dosage form comprising the cosmetic or pharmaceutical composition according to claim 46.

54. (New) A rheological modifier comprising the amphotolytic copolymer as claimed in claim 39.

55. (New) An adhesive comprising the amphotolytic copolymer as claimed in claim 39.

56. (New) A coating comprising the amphotolytic copolymer as claimed in claim 39.

57. (New) An article coated with the amphotolytic copolymer as claimed in claim 39.

58. (New) The coated article as claimed in claim 57, wherein the article is textile, paper, print or leather.